

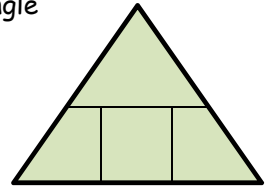
REVIEW - Interest & Credit

Show all work and place final answers on the line provided.

Name: _____

Date: _____

Fill in the triangle



1. Using the simple interest formula solve the following problems: **$I = prt$**

- a) Drayson invested a principal amount of \$650.00, with an interest rate of 7%, over 4 years. How much interest is earned?

- b) Aydan invested \$800.00 at $5\frac{1}{2}\%$ over 36 months. What is his interest earned? _____

- c) If Sabina earned \$65 interest, by investing some money over 4 years @ 3.9%.
How much money did she invest in the first place? _____

2. Solve the following compound interest problems:

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

- a) Dylan invests \$400, compounded semi-annually, at an interest rate of 5.8%.
How much money will he have at the end of his 8 year investment period? _____

b) If Christopher invests this same money (\$400, 5.8%, 8 years) *monthly*, how much will he have then?

c) Let's say that Darci earned \$250 interest on an investment over 9 years. She ended up with \$4000. What was her beginning amount?

d) **BONUS:** Julia invests some money quarterly, at 8% over 5 years. She ended up with a total amount of \$3000. How much money did she begin with?

3. Simple interest

a) If Yo Yo Ma invests \$1400 at 3%, how long will it take for his money to double? (round to 1 decimal place)

b) What if he invests \$3000 over 8 years and then had \$6000. What was the interest rate?

Answers: \$635.46, \$3750.00, \$2018.91, 33.3 years, 12.5%

4. Kayley has a credit card with an annual interest rate charge of 19.5% and a monthly limit of \$9000. She had a previous balance of \$2700 and made purchases totalling \$600. She made a payment of only \$1100. Her minimum monthly payment must be \$125 or 5% whichever is greater. Calculate the following:

a) The monthly interest rate = _____

b) The finance charge = _____

c) The new balance = _____

d) The minimum payment required = _____

e) The credit available = _____

5. Tristan needs to buy a new bedroom suite for \$2999 (plus taxes) from United Warehouse. They are offering the following "sweet" promotion to entice customers to shop there:

Option 1 - Pay Now: pay full price, plus PST, GST and a delivery charge of \$60 (including taxes)

Option 2 - Pay Later: pay taxes, delivery charge and a \$40 admin. fee (plus taxes) now and pay the \$2999 one year from now.

a) Calculate Tristan's pay-now price. _____

b) Calculate Tristan's total *pay-later* price.

c) How much more would he pay if he chooses the *pay-later* deal?

d) Express this difference as a percent rate of the total *pay-now* price.

6. Riley likes to shop. She wants to buy a 60" LED TV with Bose surround-sound for Christmas. She found one at Best Buy for \$5000 plus taxes. She needs a loan to pay for this. She decides that she can handle a loan for 5 years. The interest rate is 11%. Using the *financial calculator*, determine:

a) Riley's monthly payments for this loan.

b) The amount of interest Riley will pay for this loan.
